DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: OSGOOD POND		Lake Area (ha):	8.01
Town: MILFORD		Maximum depth (m):	2.2
County: Hillsborou	gh	Mean depth (m):	0.6
River Basin: Merrimack		Volume (m³):	47500
Latitude: 42°49'15"	N	Relative depth:	0.7
Longitude: 71°40'00"	W	Shore configuration:	1.79
Elevation (ft):	270	Areal water load (m/yr):	87.90
Shore length (m): 18	B00	Flushing rate (yr ⁻¹):	148.0
Watershed area (ha): 14	460.5	P retention coeff.:	0.25
% watershed ponded:	0.0	Lake type: natural	w/dam

BIOLOGICAL:	20 January 1992	2 August 1991
DOM. PHYTOPLANKTON (% TOTAL) #1	SPARSE - NO DOMINANT	DINOBRYON 90%
#2		
#3		
PHYTOPLANKTON ABUNDANCE (cells/mL)		340
CHLOROPHYLL-A (µg/L)		5.45
DOM. ZOOPLANKTON (% TOTAL) #1	NONE OBSERVED	SPARSE - NO DOMINANTS;
#2		HORIZONTAL NET TOW - NO
#3		CELL COUNTS
ROTIFERS/LITER	<1	
MICROCRUSTACEA/LITER	<1	
ZOOPLANKTON ABUNDANCE (#/L)	<1	
VASCULAR PLANT ABUNDANCE		Very abundant
SECCHI DISK TRANSPARENCY (m)		2.2 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)	12.6	4.9
BACTERIA (fecal col., #/100 ml) #1		200
#2		15
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m³): None Anoxic volume (m³): None

CHEMICAL: Lake: OSGOOD POND Town: MILFORD 20 January 1992 2 August 1991 0.5 DEPTH (m) 1.0 1.0 6.9 pH (units) 6.3 6.3 A.N.C. (Alkalinity) 7.6 8.0 9.2 NITRATE NITROGEN 0.24 0.24 < 0.05 TOTAL KJELDAHL NITROGEN TOTAL PHOSPHORUS 0.011 0.009 0.027 75.9 74.1 67.4 CONDUCTIVITY (µmhos/cm) 45 APPARENT COLOR (cpu) MAGNESIUM 0.78 3.4 CALCIUM 7.4 SODIUM 0.62 POTASSIUM CHLORIDE 12 11 11

6

All results in mg/L unless indicated otherwise

6

TROPHIC CLASSIFICATION: 1991

CALCITE SATURATION INDEX

SULFATE

TN : TP

D.O.	S.D.	PLANT	CHL	TOTAL	CLASS
**	2	6	1	9	Meso.

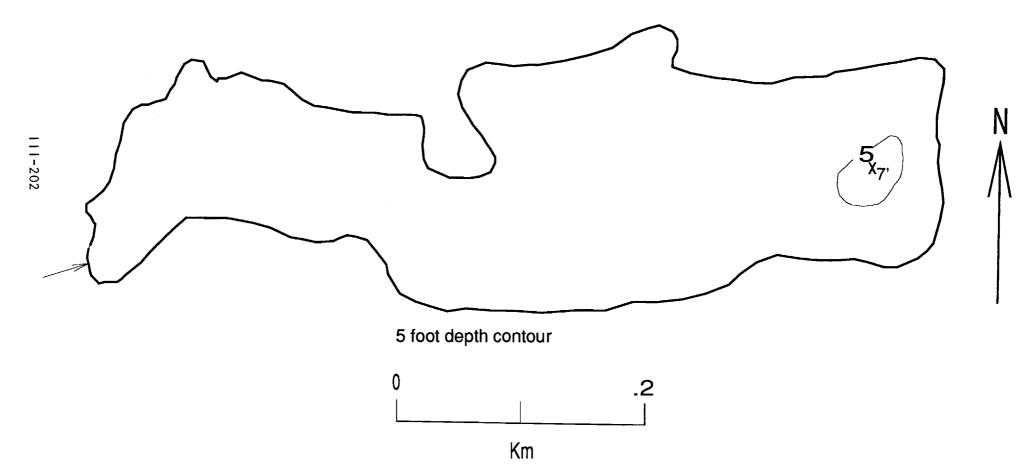
3

2.9

COMMENTS:

- 1. Also known as Unnamed Pond.
- 2. Shallow launch site; unable to use motor because of the very abundant plant growth throughout the pond.
- 3. Cryptomonas (40%) and Chroomonas (15%) were the dominant genera of wholewater plankton.

Osgood Pond Milford



FIELD DATA SHEET

LAKE: OSGOOD POND DATE: 08/02/91

TOWN: MILFORD

WEATHER: SUNNY & HOT

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.1	25.0	7.0	85 %
	1.0	24.0	6.8	80 %
	2.0	23.0	4.9	56 %
	V444			
-				

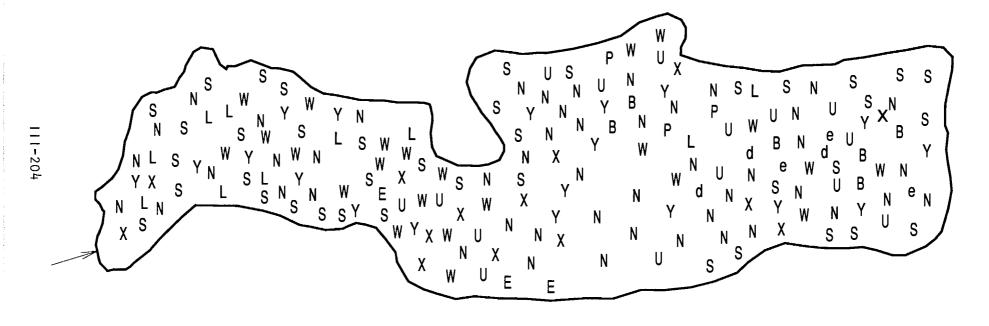
SECCHI DISK (m): 2.2 VOB COMMENTS:

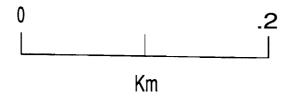
BOTTOM DEPTH (m): 2.2

TIME: 1200

*Dissolved oxygen values are in mg/L

Osgood Pond Milford





AQUATIC PLANT SURVEY

LAK	E: OSGOOD POND	TOWN: MILFORD	DATE: 08/02/91	
Key	PLANT	NAME	ABINDANCE	
ией	GENERIC	COMMON	ABUNDANCE	
х		Sterile thread-like leaf	Very abundant	
N	Nymphaea	White water lily	Very abundant	
E	Eriocaulon septangulare	Pipewort	Scattered	
Y	Nuphar	Yellow water lily	Very abundant	
S	Sparganium	Bur reed	Very abundant	
W	Potamogeton	Pondweed	Very abundant	
е	Eleocharis	Spike rush	Scattered	
U	Utricularia	Bladderwort	Very abundant	
L	Elodea nuttallii	Waterweed	Scattered	
P	Pontederia cordata	Pickerelweed	Scattered	
В	Brasenia schreberi	Water shield	Common/Abun	
d	Lemnaceae	Duckweed family	Common	

OVERALL ABUNDANCE: Very abundant

GENERAL OBSERVATIONS:

- 1. Very shallow and very weedy pond; very little area of open water.
- 2. Bladderwort, sterile thread-like leaves and filamentous algae were over most of the lake bottom. Filamentous algae was very abundant, but is not listed above or depicted on the map.
- 3. Many big snails were observed.